



Robin Hood in reverse?

Assessing the distributional effects of urban nature using a second-stage hedonic house price model

Jensen, Cathrine Ulla; Panduro, Toke Emil; Lundhede, Thomas; von Graevenitz, Kathrine ; Thorsen, Bo Jellesmark

Publication date:
2017

Document version
Peer reviewed version

Citation for published version (APA):
Jensen, C. U., Panduro, T. E., Lundhede, T., von Graevenitz, K., & Thorsen, B. J. (2017). *Robin Hood in reverse? Assessing the distributional effects of urban nature using a second-stage hedonic house price model*. Abstract from Conference of the Danish Environmental Economic Council , Skodsborg, Denmark.

Robin Hood in reverse? Assessing the distributional effects of urban nature using a second-stage hedonic house price model

ABSTRACT

We analyse the housing markets in a suburb north of the Danish capital Copenhagen. We find that households sort themselves in relation to nature area. The concentration of affluent households decreases rapidly with distance to nature. This indicates that a welfare change generated by a change in the supply of urban nature could be skewed due to a systematic difference in preference that is highly correlated with demographics. In this paper we assess if and to what extent this is the case.

We conduct a second-stage hedonic house price study and recover household-specific preferences for availability of nature. Preference parameters are identified locally through restrictions on household utility-functions. First, we assess the relation between demographic factors and household WTP for nature. Households with higher incomes and wealth have a 0.9% higher WTP per 1.000 EUR and this figure is slightly higher at the low end of the distribution. Interestingly, education mainly impacts the center of the distribution and impacts the tails less.

Our study contributes to the discussion of the distributional aspects of environmental benefits. This is a discussion mainly fuelled by stated-preference methods, and we contribute with results based on a revealed-preference method. Our results show that socio-economic distribution is a relevant factor to consider when evaluating nature area policies.

Keywords

Public policy, progressive distribution, green space, 2nd stage hedonic regression, quantile regression

Authors:

Cathrine Ulla Jensen¹, Toke Emil Panduro¹, Thomas Hedemark Lundhede^{1,2}, Kathrine von Graevenitz³, Bo Jellesmark Thorsen^{1,2}

Affiliation:

¹ Department of Food and Resource Economics, Faculty of Science, University of Copenhagen, Rolighedsvej 23, 1958 Frederiksberg Copenhagen, Denmark

² Centre for Macroecology, Evolution and Climate, University of Copenhagen, Rolighedsvej 23, 1958 Frederiksberg Copenhagen, Denmark

³ Department of Environmental and Resource Economics, Centre for European Economic Research (ZEW), P.O. Box 103443, 68034 Mannheim, Germany.